State of Alaska
FY2005 Governor's Operating Budget

Department of Health and Social Services
Public Health
Results Delivery Unit Budget Summary

Contents

Public Health Results Delivery Unit

Contribution to Department's Mission

The Department's mission is to promote and protect the health and well being of Alaskans. The Division of Public Health contributes to this mission through delivery of population-based services that prevent and control adverse health events.

Core Services

The Division of Public Health core services are:

- Prevention and control of epidemics and the spread of infectious disease;
- Prevention and control of injuries;
- Prevention and control of chronic disease and disability;
- Preparation for and response to disasters (natural disasters and terrorist attack);
- Assurance of access to early preventive services and quality health care;
- Protection of the population against environmental hazards that impact human health; and
- Ensuring effective and efficient management and administration of public health programs and services.

These services are primarily population-based and focused on achieving and preserving the health and well being of entire communities and populations. Professional staff monitor and assess the health status of Alaskans through the collection and analysis of vital statistics, behavioral risk factor data, and data on disease and injury, including forensic data from postmortem examinations. The Division uses these data and other scientific information and expertise to develop sound policy and deliver disease control and health promotion services to protect and improve the health of Alaskans.

The Division helps achieve public health goals by assuring public health services are available by encouraging, supporting and sometimes requiring their development by others, and by providing services directly when unavailable from the private sector. Staff also conduct disease surveillance and investigation and provide treatment consultation, case management and laboratory testing services to control outbreaks of communicable diseases and prevent epidemics. The Division promotes healthy behaviors by educating citizens, and mobilizing and supporting community action to reduce health risks. Outreach activities are conducted to link high-risk and disadvantaged people to needed services and direct treatment and clinical preventative services are provided to these populations.

End Results	Strategies to Achieve Results
(1) #1 People in Alaska are free from disease and injury, and have access to quality health care Target: Alaska's TB rate is less than 6.8/100,000 population. Measure: TB rate. Target: Alaska's rate of diphtheria, measles, poliomyelitis, rubella, and tetanus is 0 cases/100,000; and of pertussis, Haemophilus influenza b (Hib), and mumps is less than 8 total cases. Measure: Annual rate of vaccine-preventable disease. Target: Alaska's Chlamydia rate is less than 590/100,000 population. Measure: Chlamydia rate. Target: Reduce Alaska's unintentional injury death rate to 50/100,000 population. Measure: Unintentional injury death rate.	**(1) Ensure that the public is safe from epidemics and the spread of infectious disease.** Target: 80% of all 2 year olds are fully immunized . Measure: % of all 2 year olds are fully immunized Target: 95% of persons with TB complete adequate treatment regimen. Measure: Percent of persons with TB completing treatment regimen. Target: At least 98% of gonorrhea or chlamydia cases will complete adequate treatment, as defined by CDC's STD Treatment Guidelines. Measure: Percent of persons with STD completing treatment regimen. **(2) Ensure that the public benefits from reductions in suffering, death and disability due to injuries**

End Results	Strategies to Achieve Results
Target: Maintain rate of death due to occupational injuries at less than 10/100,000 Alaskan workers. Measure: Rate of death due to occupational injury. Target: Less than 5% of pregnant women in Alaska are physically abused. Measure: Percent of mothers of newborns who were physically abused during pregnancy. Target: Alaska'a coronary heart disease death rate is less than 120/100,000 population. Measure: Heart disease death rate. Target: Alaska's overall cancer death rate is less than 180/100,000 population. Measure: Cancer death rate. Target: Alaska's death rate from diabetes is less than 70/100,000. Measure: Death rate due to diabetes (diabetes as any cause of death). Target: No additional victims, subsequent to initial casualties, resulting from natural disasters and terrorist attack. Measure: Number of victims subsequent to a natural disaster or terrorist attack. Target: 80% of Alaskan adults report that they have at least one person they think of as their doctor or health provider. Measure: Percent of Alaskan adults report that they have at least one person they think of as their doctor or health provider Target: 90% of Alaskan communities have adequate emergency medical services. Measure: Percent of communities with adequate emergency medical services. Target: Reduce post neonatal infant mortality to less than 3.0 per 1000 live births Measure: Three year average Post Neonatal Mortality Rate Target: Reduce neural tube birth defects to less than 10 per 10,000 live births Measure: Three year average rate of neural tube defects per 10,000 live births by birth year	Target: 80% of Alaskans use seatbelts. Measure: Percent of Alaskans using seatbelts. Target: Reduce unintentional, non-fatal, hospitalized traumatic brain Injury (TBI) to Alaska youth, age 0-19, to 62.0 per 100,000 by year 2010 Measure: Rate per 100,000 of unintentional, non-fatal, hospitalized traumatic brain Injury (TBI) to Alaska youth, age 0-19 **(3) Ensure the public benefits from reductions in death and disability due to chronic disease.** Target: Less than 19% of high school youth in Alaska use tobacco products. Measure: Prevalence of tobacco use in Alaskan youth. Target: 95% of Alaskan adults have their blood pressure checked at least every 2 years. Measure: Proportion of adults who have had their blood pressure checked in past 2 years. Target: 85% of Alaskan adults are physically active. Measure: Proportion of adults who are physically active in past 30 days. Target: 76% of Alaskan women over 40 have a mammogram at least every 2 years Measure: % of Alaskan women over 40 have a mammogram at least every 2 years Target: Reduce the percentage of Alaskan adults who are overweight or obese. Measure: Percentage of Alaskan adults who are overweight or obese **(4) Minimize loss of life and suffering resulting from natural disasters and terrorist attack.** Target: 25% of the Division of Public Health staff and public health system partners are trained in disaster response techniques and procedures. Measure: Percent of the Division of Public Health staff and partners trained. **(5) Ensure that Alaskans have access to early preventive services and quality health care.** Target: Decrease communities with severe health care shortages by ten percent. Measure: Communities with severe health care shortages as defined by low provider to population ratios (as determined by federal Health Professional Shortage Area designations).

End Results	Strategies to Achieve Results
	(6) Ensure the public is protected against environmental hazards that impact human health. Target: 10% of Alaskan pregnant women are tested for mercury exposure annually Measure: % of Alaskan pregnant women are tested for mercury exposure annually. Target: 100% of all radiological services and machines in Alaska are inspected and tested over a four year period Measure: % of radiological services and machines inspected and tested

FY2005 Resources Allocated to Achieve Results

FY2005 Results Delivery Unit Budget: $64,903,100

Personnel:	
Full time	446
Part time	20
Total	466

Performance Measure Detail

(1) Result: #1 People in Alaska are free from disease and injury, and have access to quality health care

Target: Alaska's TB rate is less than 6.8/100,000 population.
Measure: TB rate.

Annual TB Rate per 100,000 population

Year	Annual				YTD Total
2002	7.6				
2001	8.5				
2000	17.2				
1999	9.8				
1998	8.9				

Analysis of results and challenges: Tuberculosis has been a long-standing problem in Alaska and was the cause of death for 46% of all Alaskans who died in 1946. Major efforts, which included 10% of the entire state budget in 1946, led to one of the state's most visible public health successes-major reductions in TB across the state. Now this disease is reemerging and with it the threat of treatment resistant strains of the disease. Significant resources are needed to do the case finding, diagnostic tests and treatment follow-up required to keep the disease in check.

Tuberculosis remains deeply entrenched in many regions of Alaska and will remain so for generations. A strong public health team, knowledgeable about current issues of TB control, is necessary if we hope to eradicate the disease once called the "Scourge of Alaska."

Target is for 2010.

Target: Alaska's rate of diphtheria, measles, poliomyelitis, rubella, and tetanus is 0 cases/100,000; and of pertussis, Haemophilus influenza b (Hib), and mumps is less than 8 total cases.

Measure: Annual rate of vaccine-preventable disease.

Annual rate and # of cases of select vaccine-preventable disease

Year	Annual	Annual			YTD Total
2002	0 for all rates	2 Hib; 7 pertussis; 0 mumps			
2001	0 for all rates	1 Hib; 16 pertussis; 1 mumps			
2000	0.16 for measles; 0 for rest	5 Hib; 21 pertussis; 8 mumps			
1999	0 for all rates	5 Hib; 5 pertussis; 3 mumps			
1998	5.3 for measles; 0 for rest	1 Hib; 15 pertussis; 3 mumps			

Analysis of results and challenges: The first column titled "Annual" reflects the yearly rate of cases of diptheria, measles, poliomyelitis, rubella and tetanus per 100,000 population in Alaska. The 0.16 rate per 100,000 reported for 2000 results from one case of measles; 5.3 rate in 1998 results from one outbreak of 33 cases of measles. The second column titled "Annual" reflects the actual number of cases of pertussis, H. influenza b (Hib), and mumps.

The true success of immunizations is determined by a reduction in morbidity from vaccine-preventable diseases. In this regard, Alaska's immunization activities can be considered remarkably successful. Diseases such as diphtheria, polio, rubella and tetanus have not been reported in the state for many years. Even measles, one of the most infectious viruses known, has been reported only once in the last four years. Other diseases such as pertussis have proven more difficult to eradicate both in Alaska and throughout the country. Challenges to maintaining these low disease rates include:

· Maintaining high immunization levels (and thus preventing disease) is extremely difficult for several reasons. The value of vaccines is under constant attack by individuals who have forgotten, or never learned, the potentially deadly impact of the diseases themselves. Additionally, the immunization schedule has grown extremely complex with the addition of new vaccines and additional doses, causing confusion among parents and providers alike.

· Vaccine costs have increased dramatically in recent years, greatly stressing our ability to provide universally recommended vaccines for Alaskans. For example, relatively new vaccines to prevent varicella (chickenpox) and pneumococcal disease cost over $40/dose. Maintaining financial support to provide these vaccines in a state with such enormous geographic and logistic challenges to vaccine delivery will remain difficult.

· Pertussis immunization recommendations currently stop at age 7, but the disease is being increasingly reported in adolescents and adults. Research is ongoing to develop a vaccine that is effective for persons age 7 or above. Until this is available, however, pertussis will be difficult if not impossible to eradicate.

· Within the last three years major shortages of some vaccines have occurred, affecting our ability to provide timely immunizations. If this were to continue on a long-term basis, disease morbidity would be expected to increase.

· Education of providers in disease recognition techniques is essential. Many newer physicians have never seen several of the diseases preventable with vaccines. Without sufficient education and heightened awareness, a provider inadvertently could allow a person with an infectious disease to expose many additional persons before prevention measures could be instituted.

Finally, the most compelling argument for the challenges to maintaining our immunization levels (and decreasing disease morbidity) are found by examining the workload resulting from the increased number of injections recommended for an increasingly large population. This is especially obvious when you compare vaccine recommendations & population size from 20 years ago with today.

The number of vaccines recommended per person by age 18 has grown from 9 in 1980 to 25 per person in 2002. The Alaska population ages 0-18 years has grown from 145,000 in 1980 to 208,100 in 2002. This results in growth of the total number of doses needed to provide all medically recommended vaccines to Alaska children ages 0-18, from 1.3

million in 1980 to 5.2 million doses in 2002.

Target: Alaska's Chlamydia rate is less than 590/100,000 population.
Measure: Chlamydia rate.

Chlamydia rate per 100,000

Year	Annual				YTD Total
2002	591				
2001	429				
2000	413				
1999	304				
1998	307				

Analysis of results and challenges: Infectious diseases remain major causes of illness, disability, and death. New infectious agents and diseases are being detected, and some diseases once under control have reemerged in recent years. In addition, antimicrobial resistance is evolving rapidly.

Many challenges still exist in the prevention and control of infectious diseases. Targeted screening and increased disease investigation activities have actually increased the total numbers of STD cases diagnosed. These activities effectively identify infected individuals with no symptoms and also identify and treat exposed individuals before they develop symptoms or further transmit infection. Case numbers are expected to decline over time as these activities reduce the reservoir of infected individuals in the population.

Chlamydia infection was the most frequently reported disease in Alaska in 2000, with 2,570 cases reported. The year 2000 case numbers were greater than case numbers in 1999, when 1,888 chlamydia cases were reported in Alaska. In 2000, Alaska was ranked second highest in the United States in its chlamydia case rate. The increased number of cases most likely results from better case finding due to the introduction of targeted chlamydia screening, use of new urine screening technologies, and increased partner notification activities in 2000 rather than from an actual increase in the amount of disease.

Target: Reduce Alaska's unintentional injury death rate to 50/100,000 population.
Measure: Unintentional injury death rate.

Unintentional Injury Death Rate per 100,000 population

Year	Annual				YTD Total
2000	63.5				
2001	60.5				

Analysis of results and challenges: Injuries are a significant public health and social services problem because of the prevalence of injuries, the toll of injuries on the young, and the high cost in terms of resources and suffering. Alaska has one of the highest injury rates in the nation. Both the intrinsic hazards of the Alaska environment and low rates of protective behavior contribute to injuries. Unintentional injuries were the third leading cause of death in Alaska in 1998. Unlike heart disease and cancer, which are the leading causes of death among the elderly, injuries are the leading cause of death in children and young adults.

The Division of Public Health along with its many partners continue to see the benefits of actions related to injury control and prevention. The safe boating act and kids don't float are only two examples of the activities that contribute to success in reaching and maintaining this target. The Division of Public Health's Injury Control Program will continue to partner with others and to use surveillance and prevention strategies to understand and target interventions.

Target: Maintain rate of death due to occupational injuries at less than 10/100,000 Alaskan workers.
Measure: Rate of death due to occupational injury.

Rate of death due to occupational injury

Year	Annual				YTD Total
2000	5.6				
2001	4.3				

Analysis of results and challenges: Occupationally-related injury death rates are thought to be declining due to surveillance and prevention activities. For example, a considerable effort has been made in the fishing industry with respect to safety. Continued efforts by the Division of Public Health and its many partners will be important in Alaska maintaining this target.

Work-related injuries and illnesses are those incurred by people engaged in work-related activities while on or off the worksite. These include injuries and illnesses that occur during apprenticeships, vocational training, working in family businesses, and even volunteer work as fire fighters or emergency medical services providers.

A retrospective view of Alaska's economic challenges since statehood in 1959 reveals periods of boom, recession, and regrowth in several industries and service sectors. Often jobs are in acutely perilous environments (e.g., frigid waters) or on treacherous terrain (e.g., steep, mountainous). In the 1990s the labor force in Alaska continued to grow, particularly in the construction, air transportation, communication, and retail sales industries.
Alaska's rate of traumatic occupational injuries remains much higher than the United States rate. Traumatic work-related injuries in Alaska are, in part, a function of the distribution of workers in hazardous industries and high-risk environments. Nonfatal work-related injuries, with at least one day lost from work, occur at greater rates in construction, logging, fish processing, and transportation. Falls, machinery, and being struck by an object caused the majority of the injuries. Occupations with the greatest risk of fatal work-related injuries include commercial fishing, commercial aviation, and logging.

Fatal and nonfatal injury data indicate that employment in certain industries, particularly commercial aviation, commercial fishing, construction, and logging, significantly increases the risk of injury to Alaskan workers. Premature loss of life, lifetime health care for severely injured workers, increased economic costs (hospitalization and other health care costs, workers compensation, etc.), loss of worker productivity, declines in workplace efficiency, and increased psychosocial stress are further results of the high rate of worker injury and death in Alaska. Psychological trauma, social disruption, unemployment, reduced family income, and reduced quality of life are also consequences of occupational injuries and fatalities.

Target: Less than 5% of pregnant women in Alaska are physically abused.
Measure: Percent of mothers of newborns who were physically abused during pregnancy.

Percent of mothers of newborns who were physically abused during pregnancy

Year	Annual				YTD Total
2000	6.4%				

Analysis of results and challenges: Interpersonal violence has profound effects on the health of individuals, families, and communities. Research links family violence to developmental delays, behavioral and emotional disorders, juvenile crime, and substance abuse. A public health approach to violence both complements and contrasts with the criminal justice approach. Techniques similar to those used in injury and disease prevention – surveillance, identification of risk and protective factors, and the development of interventions – are applied to violence prevention. Intervention strategies may modify individual behavior, the social and physical environment, or both. Evaluation of the intervention is a crucial component of the public health approach.

In the public health model, the root causes of violence are complex and include economic, oppression, and mental health issues. Risk factors, such as access to firearms, alcohol abuse, and the effects of witnessing violence, are often targets for intervention. Prevention programs may include increasing protective factors, such as conflict resolution and parenting skills, through school and community education.

This indicator combines prenatal physical abuse by husband/partner with prenatal physical abuse by anyone else; 2000 is the latest data available.

Target: Alaska'a coronary heart disease death rate is less than 120/100,000 population.
Measure: Heart disease death rate.

Heart Disease Death Rate per 100,000

Year	Annual				YTD Total
2000	137.7				
2001	135.8				

Analysis of results and challenges: Nationally, heart disease is the leading cause of death for all Americans. An estimated twelve million men and women have a history of coronary heart disease (the most common form of heart disease). In 1998, almost 460,000 people died of coronary heart disease (44% of these deaths were from heart attacks). Although death rates from coronary heart disease have declined since the late 1960s, the line has slowed since 1990. The lifetime risk for developing this disease is very high in the United States. One of every two males and one of every three females aged 40 years and under will develop it sometime in their life. Heart disease is the second leading cause of death in Alaska, and cerebrovascular disease (most commonly referred to as stroke) is the fourth leading cause of death in Alaska.

Target: Alaska's overall cancer death rate is less than 180/100,000 population.
Measure: Cancer death rate.

Cancer death rate per 100,000

Year	Annual				YTD Total
2000	209.0				
2001	191.2				

Analysis of results and challenges: Cancer is not a single disease, but rather a constellation of more than 100 related diseases. Everyone is at risk of cancer. In the United States, half of all men and one-third of all women will develop cancer during their lifetimes. Of the approximately 491,000 Americans who are diagnosed with cancer in any given year, four of every ten are expected to be alive five years after diagnosis. Cancer was rarely seen in Alaska during the 1950s, but in the 1990s cancer was the leading cause of death in Alaska.

Target: Alaska's death rate from diabetes is less than 70/100,000.
Measure: Death rate due to diabetes (diabetes as any cause of death).

Death rate due to (any mention of) diabetes per 100,000 population

Year	Annual				YTD Total
2002	66.2				
2000	59.0				
2000	78.1				
1999	73.7				

Analysis of results and challenges: Diabetes is a chronic disease that usually manifests itself as one of two distinct categories. Type 2 diabetes usually occurs in adults over age 30 years and develops as a result of the body's inability to use its own limited amount of insulin effectively. Type 2 diabetes accounts for 90 percent to 95 percent of all diagnosed cases. Risk factors for type 2 diabetes include older age (40 plus years), obesity, family history of diabetes, prior history of gestational diabetes, impaired glucose tolerance, physical inactivity, and race/ethnicity.

Diabetes is the leading cause of blindness and end-stage renal disease in adults. Diabetes increases the risk of heart disease, stroke, and many infectious diseases. Nerve damage from diabetes is the leading cause of lower extremity amputations. Type 2 diabetes is more common in women than men. Incidence increases with age, and the prevalence of diabetes in the United States is expected to increase as the population ages and diabetics live longer.

Target: No additional victims, subsequent to initial casualties, resulting from natural disasters and terrorist attack.
Measure: Number of victims subsequent to a natural disaster or terrorist attack.

Number of victims subsequent to a natural disaster or terrorist attack

Year	Annual				YTD Total
2003	n/a				

Analysis of results and challenges: When disaster (natural or man made) strikes we must strive to eliminate post-event casualties. The Division of Public Health must work together with our other local, state, federal, Tribal,non-Governmental Organizations and private partners to assure disaster preparedness in Alaska enabales a rapid and effective disaster response capability.

Table will need to be based on events as they occur.

Target: 80% of Alaskan adults report that they have at least one person they think of as their doctor or health provider.
Measure: Percent of Alaskan adults report that they have at least one person they think of as their doctor or health provider

% of Alaskan adults report that they have at least one person they think of as their doctor or health provider

Year	Annual				YTD Total
2002	71%				

Analysis of results and challenges: Clinical preventive services impact many of the leading causes of disease and death. People must have access to clinical preventive services that are effective in preventing disease (primary prevention) or in detecting disease early when treatment is an option. Improving access to appropriate preventive care requires addressing barriers that involve the patient, provider, and system of care. Barriers that limit access to preventive care include lack of knowledge, skepticism about the effectiveness of prevention, lack of a usual source of primary care, and lack of money to pay for preventive health care. Access to health care often depends on whether a person has health insurance. Having health insurance, a higher relative income, and a usual primary care provider are strong predictors that a person will receive appropriate preventive care.

2002 is baseline year.

Target: 90% of Alaskan communities have adequate emergency medical services.
Measure: Percent of communities with adequate emergency medical services.

Percent of communities with adequate emergency medical services

Year	Annual				YTD Total
2002	90%				

Analysis of results and challenges: An adequate emergency medical services system is essential to the health and safety of a community. Comprehensive EMS systems reduce the number of injuries, prevent death and disabilities, and make efficient use of medical resources. Communities with adequate emergency medical services systems share characteristics such as: easy access to the EMS system through a 911 system; trained and equipped rescuers; and a system for assessing and transporting patients quickly to definitive medical care.

Although data relating to some form of this measure has been collected for about 20 years, there is not consistent data that can be adequately compared for that time period. Our plan for this measure is to collect and report on this measure consistantly beginning with the 2002 data.

2002 is baseline year.

Target: Reduce post neonatal infant mortality to less than 3.0 per 1000 live births
Measure: Three year average Post Neonatal Mortality Rate

Three year average Post Neonatal Mortality Rate

Year	1996-98	1997-99	1998-2000		YTD Total
0	3.6	3.6	3.0		

Analysis of results and challenges: Data are three-year moving averages as indicated across the top.

Despite a 43% decline in postneonatal mortality between 1998 and 2000, Alaska's postneonatal death rate remained 35% higher than the national average in 2000. Post neonatal mortality is more often caused by environmental conditions than problems with pregnancy and childbirth. Most postneonatal deaths are preventable and, as Alaska has demonstrated over the last decade, epidemiological information can be used in education and prevention programs to decrease risk factors for preventable infant deaths.

Target: Reduce neural tube birth defects to less than 10 per 10,000 live births
Measure: Three year average rate of neural tube defects per 10,000 live births by birth year

Three year average rate of neural tube defects per 10,000 live births by birth year

Year	1996-98	1997-99	1998-2000		YTD Total
0	10.7	10.7	10.0		

Analysis of results and challenges: Data are three-year moving averages as indicated across the top of the table.

Neural tube defects, including spina bifida, are an example of a preventable birth defect. For women of reproductive age, increasing folic acid intake can reduce the risk of these and possibly other birth defects by as much as 70%. Tracking the prevalence of spina bifida demonstrates the effect epidemiological analysis of surveillance data can have on providing critical information to prevention programs for targeting educational interventions.

(1) Strategy: Ensure that the public is safe from epidemics and the spread of infectious disease.

Target: 80% of all 2 year olds are fully immunized
.
Measure: % of all 2 year olds are fully immunized

% of 2-year olds Fully Immunized

Year	Annual				YTD Total
2002	78.3%				
2001	74.1%				
2000	77.0%				
1999	80.1%				
1998	81.3%				

Analysis of results and challenges: In 2002, 78.3% of Alaska two year olds had completed their basic vaccine series, a percentage that slightly exceeded the national average of 77.5%. Maintaining or exceeding this percentage is a continuing challenge for several reasons:

· Because vaccines are effective in preventing disease, many young parents (and even providers) have never seen the diseases prevented by vaccines, and they have lost their fear of these illnesses.

· Vaccine misinformation has proliferated on the internet and in the media during the last 5-10 years, causing some parents to question the advisability of having their children immunized against diseases that "aren't around anymore."

· The number of injections and types of vaccines recommended for children have increased dramatically in the last few years. Even the most well-intentioned parents can become confused about whether their children are "up to date" on their immunizations.

· Many Alaska children do not attend licensed child care facilities, and thus are not subject to Alaska immunization requirements that would assure they receive necessary vaccines in a timely manner.

· Responding to competing public health needs can divert medical provider capacity to provide basic program activities such as vaccine delivery to young children. For example, new school and childcare requirements for immunization against hepatitis A and B were implemented in 2001. Although prevention of these diseases is of critical public health importance, implementing these new requirements diverted attention from "routine" activities such as infant immunization. Another example is found in increased activities necessitated by response to potential bioterrorism.

Target: 95% of persons with TB complete adequate treatment regimen.
Measure: Percent of persons with TB completing treatment regimen.

% of Persons with TB Completing Treatment Regimen

Year	Annual				YTD Total
2002	96%				

Analysis of results and challenges: The highest priority for TB control is to ensure that persons with the disease complete curative therapy. If treatment is not continued for a sufficient length of time, such persons become ill and contagious again. Completion of therapy is essential to prevent transmission of the disease as well as to prevent the development of drug-resistant TB. The measurement of completion of therapy is a long-accepted indicator of the effectiveness of community TB control efforts.

Target: At least 98% of gonorrhea or chlamydia cases will complete adequate treatment, as defined by CDC's STD Treatment Guidelines.
Measure: Percent of persons with STD completing treatment regimen.

% of gonorrhea or chlamydia cases will complete adequate treatment

Year	Annual				YTD Total
2003	99.5%				

Analysis of results and challenges: The basic public health infrastructure for STD and HIV prevention and control is in place: public health laboratory services, public health capacity for patient and partner follow up, and capacity to provide epidemiologic support, data analysis, and data dissemination. Some elements of this infrastructure currently need additional resources to strengthen and expand them, and all require ongoing maintenance. Given changes in overall health care systems, efforts to assure and coordinate clinical and public health activities will be needed on an ongoing basis.

Identification of contacts of STD cases, their notification, and appropriate testing and treatment is a key strategy for the STD program.

From 1/1/03-9/30/03, 99.5% of patients were appropriately treated (only 16 of 3310 reported cases gonorrhea and chlamydia were not appropriately treated).

(2) Strategy: Ensure that the public benefits from reductions in suffering, death and disability due to injuries

Target: 80% of Alaskans use seatbelts.
Measure: Percent of Alaskans using seatbelts.

% of Alaskans using Seatbelts

Year	Annual				YTD Total
2001	63%				
2000	61%				
1999	61%				
1998	61%				

Analysis of results and challenges: Injuries are a significant public health and social services problem because of the prevalence of injuries, the toll of injuries on the young, and the high cost in terms of resources and suffering. Alaska has one of the highest injury rates in the nation. Both the intrinsic hazards of the Alaska environment and low rates of protective behavior contribute to injuries and injury. Unintentional injuries were the third leading cause of death in Alaska in 1998. Unlike heart disease and cancer, which are the leading causes of death among the elderly, injuries are the leading cause of death in children and young adults.

Studies have shown that a primary seatbelt enforcement laws that allow law enforcement officers to stop and cite motorists for failing to comply with the seatbelt law is most effective in reaching a higher level of seatbelt use compliance. Efforts continue to increase seatbelt use through public information messages and other targeted

activities. Legislative changes and additional resources may be needed to achieve the target.

Target: Reduce unintentional, non-fatal, hospitalized traumatic brain Injury (TBI) to Alaska youth, age 0-19, to 62.0 per 100,000 by year 2010
Measure: Rate per 100,000 of unintentional, non-fatal, hospitalized traumatic brain Injury (TBI) to Alaska youth, age 0-19

Rate per 100,000 of unintentional, non-fatal, hospitalized traumatic brain Injury (TBI) to Alaska youth, age 0-19

Year	Annual				YTD Total
2000	73.0				
1999	75.2				
1998	82.4				

Analysis of results and challenges: Injuries are a significant public health and social services problem because of the prevalence of injuries, the toll of injuries on the young, and the high cost in terms of resources and suffering. Alaska has one of the highest injury rates in the nation. Both the intrinsic hazards of the Alaska environment and low rates of protective behavior contribute to injuries and injury. Unintentional injuries were the third leading cause of death in Alaska in 1998. Unlike heart disease and cancer, which are the leading causes of death among the elderly, injuries are the leading cause of death in children and young adults.

Traumatic brain injury (TBI) can significantly affect many cognitive, physical, and psychological skills. Physical deficit can include ambulation, balance, coordination, fine motor skills, strength, and endurance. Cognitive deficits of language and communication, information processing, memory, and perceptual skills are common. Psychological status is also often altered. Adjustment to disability issues are frequently encountered by people with TBI.

A 1997 14-state study showed the rate for all ages to be 69.7/100,000 and to be highest for Alaska Natives and also for those age 15 to 19 years. Also, Alaska ranked #5 for TBIs among the 14 states overall.

(3) Strategy: Ensure the public benefits from reductions in death and disability due to chronic disease.

Target: Less than 19% of high school youth in Alaska use tobacco products.
Measure: Prevalence of tobacco use in Alaskan youth.

Prevalence of tobacco use in Alaskan youth in last 30 days

Year					YTD Total
2003	19%				
0		0	0	0	0

Analysis of results and challenges: Many Alaskans are currently at risk for developing cardiovascular disease due to such risk factors as smoking, overweight, poor diet, sedentary lifestyle, high blood pressure and cholesterol, and lack of preventive health screening. Smokers' risk of heart attack is more than twice that of nonsmokers. Chronic exposure to environmental tobacco smoke (second-hand smoke) also increases the risk of heart disease. Cigarette smoking is also an important risk factor for stroke.

Tobacco is a leading cause of preventable disease and death in the United States. The majority of Alaska smokers (almost 80%) began smoking between the ages of 10 and 20 years. Alaskans have been working to decrease youth tobacco use through increasing the tax on tobacco products, education of young people, enforcement of laws restricting sales to minors, and a statewide ban on self-service tobacco displays.

In 1995, 37% of Alaska youth reported smoking at least once in the last thirty days, compared with 19% in 2003. Data is available from the Youth Risk Behavior Survey when enough Alaska schools participate to give results that can be generalized to the high school population as a whole in the State. This has been the case in 1995 and 2003. Surveys occurred in other years, however, they did not have enough participatants to provide statewide results. It is the goal of the Division of Public Health to continue to work with schools to collect a representative sample every other year.

Target: 95% of Alaskan adults have their blood pressure checked at least every 2 years.
Measure: Proportion of adults who have had their blood pressure checked in past 2 years.

% of adults who have had their blood pressure checked in past 2 years

Year	Annual				YTD Total
1999	94%				

Analysis of results and challenges: High blood pressure increases the risk of stroke and heart attack. High blood pressure is the most important controllable risk factor for stroke. Effective treatment of high blood pressure appears to be a key reason for the decline in the death rates for stroke.

Target: 85% of Alaskan adults are physically active.
Measure: Proportion of adults who are physically active in past 30 days.

% of adults who are physically active in past 30 days.

Year					YTD Total
2002	78%				

Analysis of results and challenges: Regular physical activity protects against heart disease, colon cancer, diabetes, depression and anxiety. People who exercise regularly outlive those who do not exercise. People with risk factors for heart disease such as obesity and high blood pressure may particularly benefit from physical activity. Regular physical activity maintains normal muscle strength, joint structure and joint function and is essential for normal skeletal development and attainment of optimal peak bone mass during childhood and adolescence. Even among persons in poor health, physical activity can improve their quality of life by enhancing psychological well-being and improving physical functioning.

Target: 76% of Alaskan women over 40 have a mammogram at least every 2 years
Measure: % of Alaskan women over 40 have a mammogram at least every 2 years

% of Alaskan women over 40 have a mammogram at least every 2 years

Year	Annual				YTD Total
2002	72%				

Analysis of results and challenges: Mammography screening has been proposed to reduce breast cancer mortality through early detection, especially in women over 50. The American Cancer Society and most health care professional societies recommend screening mammography.

Target: Reduce the percentage of Alaskan adults who are overweight or obese.
Measure: Percentage of Alaskan adults who are overweight or obese

% of Alaskan adults who are overweight or obese

Year	Annual				YTD Total
2002	61%				
2001	63%				
2000	59%				
1999	61%				
1998	58%				

Analysis of results and challenges: Overweight and obesity affect a large proportion of the Alaska population. According to Alaska Behavioral Risk Factor Surveillance System (BRFSS) data, over the last decade, the percent of overweight adults (body mass index greater than 25 and less than 30) age 18 and older has increased from 35 percent in 1991 to 40 percent in 1999. Obesity (body mass index greater than 30) increased from 13 percent to 20 percent in the same interval. This trend is consistent with national data that shows increases in the prevalence of both overweight and obesity.

There has been an alarming increase in the number of overweight and obese persons. Many diseases are associated with overweight and obesity. People who are overweight or obese are at increased risk for high blood

pressure, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, and some types of cancer. The health outcomes related to these diseases, however, often can be improved through weight loss or, at a minimum, no further weight gain.

Goal is to reduce to 59% by 2005.

(4) Strategy: Minimize loss of life and suffering resulting from natural disasters and terrorist attack.

Target: 25% of the Division of Public Health staff and public health system partners are trained in disaster response techniques and procedures.
Measure: Percent of the Division of Public Health staff and partners trained.

% of DPH staff and partners trained

Year	FY2004	FY2005	FY2006	FY2007	YTD Total
2004	n/a				

Analysis of results and challenges: Disaster response training for DPH staff (response and management personnel) as well as our public health partners will enable DPH to carry out our role(s) in disaster response operations. Training is the critial link between planning and exercises and permits all concerned to maintain a common knowledge base.

This phase of the Division's efforts is becoming active now and data is expected for reporting in 2004.

(5) Strategy: Ensure that Alaskans have access to early preventive services and quality health care.

Target: Decrease communities with severe health care shortages by ten percent.
Measure: Communities with severe health care shortages as defined by low provider to population ratios (as determined by federal Health Professional Shortage Area designations).

% of Communities with supported providers meeting the identified shortage

Year	Annual				YTD Total
2003	35%				

Analysis of results and challenges: A goal for Healthy Alaskans 2010 to "Improve access to comprehensive, high quality health care services" requires both:

Improvement in the distribution of qualified primary care, dental and mental health care providers which DPH helps to implement through facilitation of the National Health Service Corps provider placements, J1 Visa program, and collaborating with the Indian Health Service Loan Repayment program; and

Improvement in the availability of adequate health facilities – this is implemented through assistance to communities (providing health status data and technical assistance) to support their applications for grants for health care facilities such as community health centers, rural health clinics, community planning activities, etc. Medically underserved area/population designation requests are submitted by DPH/DHSS to meet grant program requirements that enable communities to apply for funds.

Another Healthy Alaskans 2010 target is to "Ensure that a process to assess and monitor the public health workforce in Alaska and to develop plans for meeting statewide workforce needs is implemented and maintained."

The infrastructure needed to support these activities that benefit the population of the entire state (and visitors who have medical needs on their visits) include the shortage designation support services and the workforce surveillance, recruitment and retention activities managed through the Primary Care and Rural Health Unit. People in the shortage designated areas are more likely to have providers and viable health care services; the state as a whole benefits when preventive services, primary care, early treatment and stabilization of injury and medical emergencies reduce the need for medevacs and expensive tertiary services. Medicaid costs are minimized, and people have better quality

of life as well as health status with more adequate and accessible health care services.

Goal would be to decrease to 32% of communities with severe health care shortages by 2005.

(6) Strategy: Ensure the public is protected against environmental hazards that impact human health.

Target: 10% of Alaskan pregnant women are tested for mercury exposure annually
Measure: % of Alaskan pregnant women are tested for mercury exposure annually.

% of Alaskan pregnant women are tested for mercury annually

Year					YTD Total
2004	n/a	0	0	0	0

Analysis of results and challenges: Human exposure to mercury occurs primarily through fish consumption in Alaska. The developing fetus is the most sensitive to the adverse health effects associated with mercury exposure, which include neurodevelopmental abnormalities. Mercury is incorporated in hair as it grows, thus the level of mercury in a woman's hair can provide valuable information about exposure to mercury in the diet. The information gained through this surveillance program will provide the data necessary for developing appropriate public health policies and dietary guidelines for Alaskans.

Current funding allows for testing of mercury only for pregnant women in Alaska on a voluntary basis.

Target: 100% of all radiological services and machines in Alaska are inspected and tested over a four year period
Measure: % of radiological services and machines inspected and tested

% of Radiological services and machines inspected and tested

Year					YTD Total
2004	n/a				
2005	n/a				

Analysis of results and challenges: Every year, thousands of Alaskans seek diagnostic and therapuetic services from radiation-producing devices. An average of 10% of these devices fail inspection either through a device failure or failure to comply with some aspect of the regulations surrounding operation of these devices. Additionally, there is an increasing trend of operators of these devices failing to register these devices. Through aggressive inspection and modernization of State statute, inspection failure will be reduced to < 5% and all radiation producing devices will be registered. There are approximately 347 facilities with 713 ionizing radiation devices. When an inspection is done, all devices at that facility are checked. On average there are about 85 inspections per year. The devices are not randomly spread throughout the state but rather clustered and to minimize travel all devices for a location are inspected at once. This causes the number of inspections per year to fluctuate from 60 to 120.

Goal:
Each year inspect at least 25% of all radiation producing devices with all devices being inspected over a 4-year cycle.

Key RDU Challenges

DHSS is continuing to restructure in an effort to maximize federal funding for important health services and to provide core services to Alaskans as efficiently as possible. As the Department reorganization continues in FY2005, several issues face the Division of Public Health.

The main challenge for the RDU in FY2005 is the redesign of Public Health Nursing service delivery functions in urban areas. As the provision of many direct clinical preventive services in selected areas is transitioned out of the Section of Public Health Nursing, it is essential that these services be picked up and provided by other health care organizations in Alaska. It is critical that the RDU and the Department clearly communicate and effectively coordinate this transition of services with tribal, non-profit and private sector providers. In FY2005 the remaining staff in these locations will be dedicated to improving disease control and assisting in the transfer of services to other providers.

A related challenge is the increasing demand for disease control services to Alaska's growing population. To assure the level of public health services necessary to protect Alaskans across our state against preventable diseases, there is a need to assure an adequate Public Health Nursing workforce – the "foot soldiers" of Alaska's public health system. The most basic and mandated responsibility of the Division is to protect the public's health. Disease control is central to delivering on that responsibility. Disease control is critical to Alaska's viability as a tourist destination and a place where businesses want to operate.

Other challenges include:

Integrate the Certification and Licensing program into the RDU after it was transferred from the Division of Health Care Services, Division of Behavioral Health and the Division of Senior and Disablility Services.

Creating a new Section of Chronic Disease to better protect Alaskans while successfully maintaining focus on the important core functions of the RDU, including preventing and controlling chronic disease and disability, and assuring access to early preventive services and quality health care.

Assuring uninterrupted information technology (IT) services within the RDU so that public health assessment and epidemiological research activities are not negatively impacted, while coordinating changes ordered in the statewide IT centralization plan.

Obtaining adequate long-term funding to support and enhance the existing capability to prevent and intervene in the transmission of communicable diseases – and to respond to potential bio-terrorism attacks – and to maintain this capacity over time.

Identifying workforce development issues, including lower salaries when compared with similar agencies private and public, to develop and implement new strategies for improving recruitment, retention and support for qualified staff at all levels statewide.

Using the newly developed strategic plan for the Division of Public Health and implementing a performance-based management approach that will deliver the best possible results to the people of Alaska in an efficient and effective manner.

The Environmental Public Health and Tuberculosis Control programs face serious budgetary problems unless federal funding is secured in Federal Fiscal Year 2004.

Continuing to emphasize the overall efforts of the Division and other health partners to increase the level of children less than two years old who are fully immunized.

Promoting, integrating and facilitating the work of the Denali Commission with its focus on facility construction and repair and primary care service delivery in rural and underserved areas.

Maintaining and enhancing relationships with tribal and other local health service entities to ensure that local health planning and service delivery is done in an integrated, cost-effective and efficient manner. Public Health Nursing will devote its energies to assist our partners in assuming responsibility for preventive clinical services wherever possible .

Continuing to build on progress made by reducing youth smoking for tobacco prevention and control, which will strengthen efforts to lessen the negative impact of tobacco on all Alaskans.

Assuring continued compliance in the RDU with provisions of the federal Health Insurance Portability and Accountability Act (HIPAA), especially meeting the April 20, 2005 deadline to address physical and administrative security requirements for protected health information.

Reducing the high rate of injury and death related to risk factors unique to Alaska.

Recruiting and retaining volunteer Emergency Medical Services providers, the public health workforce and primary care providers.

Continuing to enhance and strengthen the Child Fatality Review Team to make sure suspicious or untimely deaths are

reviewed and, if necessary, properly investigated.

Adding capacity to the Biomonitoring Program to monitor human exposures to environmental chemicals and help address pressing environmental health concerns in Alaska. For example, subsistence consumers and other Alaska fish-eaters will receive important contaminant exposure information to help them make informed dietary choices.

Significant Changes in Results to be Delivered in FY2005

Public Health Nursing section plans to restructure and outsource more services in FY2005. Every effort will be made to transition clients who receive clinical services to other health care providers. Communication and coordination with other health care organizations in Alaska will be important for the success of this effort.

A strategic management plan will be fully in place in FY2005, facilitating performance-based management decisions that can be focused on delivering essential core services in an era of budgetary discipline.

The responsibility for educating vendors, gathering data and enforcing laws governing the sale of tobacco products to minors is being transferred to the Division of Behavioral Health.

Certification and licensing functions have been transferred into the Public Health RDU, a significant addition to the Division's function workload.

Information Technology (IT) functions are being transferred to the Division of Administrative Services. This will consolidate IT functions and allow for a better department-wide focus and more efficient operations.

Major RDU Accomplishments in 2003

The public health team – epidemiology, laboratory and nursing staff, and the emergency medical services community – remained well prepared and on alert for potential natural disasters and terrorist attack. Staff continues to respond to concerns and requests for service and training, while continually upgrading capacity to both detect and respond to any event.

Public Health responded effectively and professionally to several scares involving patients with symptoms of Severe Acute Respiratory Syndrome (SARS), including two cases that involved 10-day isolations of patients in Anchorage and Juneau hospitals. While SARS was never diagnosed in Alaska, the statewide public health infrastructure performed well. The FY2003 cases provided an important look at planning and preparation needs.

In FY2003 Public Health Nurses in Alaska provided 157,347 health care visits to 83,621 patients.

The Division continued an aggressive immunization campaign at the state and local level to assure that Alaska's children are immunized against preventable childhood diseases.

Renewed the Hallmark immunization greeting card program, which assists in statewide disease prevention efforts by sending a congratulatory greeting card and immunization reminder from the Governor and First Lady to parents of Alaska newborns.

Distributed and installed 2,331 smoke alarms in rural and low-income residences throughout Alaska to help prevent deaths from house fires.

Coordinated the installation of 75 more "Kids Don't Float" life jacket loaner sites in Alaska – bringing the total to 348 loaner stations in 142 communities around Alaska – and resulting in two documented "saves" in FY2003.

Assisted 21 health care organizations in Alaska in receiving federal "330" Community Health Center grants from the federal Health Resources and Services Administration, resulting in health services being delivered in more than 50 primary care clinics throughout the state.

Continued work with the Denali Commission to establish and manage applications and awards for health care facility construction. The Division Director chairs the Health Steering Committee and Division staff help coordinate a process that ensures communities most in need of a facility will receive the help they need in becoming a competitive applicant.

For the third year in a row, the Alaska Cancer Registry has been awarded gold certification by the national standard setting organization, North American Association of Central Cancer Registries, for meeting standards in data quality, timeliness and completeness.

Completed the FY2003 Youth Risk Behavior Survey (YRBS), the first statistically valid survey of Alaska youth since 1995. The survey shows a steep drop in youth smoking after Alaska for the past several years invested relatively heavily in a tobacco prevention and control program. An Epidemiology Bulletin reporting the YRBS credits a strong partnership between state government and the Alaska Tobacco Control Alliance, a coalition of anti-smoking health organizations.

Achieved compliance with federal SYNAR requirements for illegal sales of tobacco to youth. As a result, the State will not incur federal financial penalties in FY2005.

Through the Section of Public Health Laboratories, successfully implemented new laboratory testing capabilities for West Nile Virus and Norovirus (Norwalk-like Virus) through training of staff microbiologists and acquisition of needed testing equipment.

Formed the Alaska Laboratory Response Network Steering Committee to coordinate lab services in Alaska in the event of bioterrorism attack, other infectious disease outbreaks, or other public health threats and emergencies.

Implemented a new heirloom birth certificate by Alaska artist Jon Van Zyle, the proceeds of which benefit the Alaska Children's Trust and its goal of reducing child abuse and neglect.

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Public Health
RDU Financial Summary by Component

All dollars shown in thousands

	FY2003 Actuals				FY2004 Authorized				FY2005 Governor			
	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds
Formula Expenditures												
None.												
Non-Formula Expenditures												
Nursing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8,878.0	2,585.7	6,602.1	18,065.8
Public Health Admin Svcs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	458.8	2,052.0	314.0	2,824.8
Certification and Licensing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	785.7	908.9	155.4	1,850.0
Epidemiology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,372.7	13,801.4	1,308.6	17,482.7
Bureau of Vital Statistics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	254.6	1,630.9	1,885.5
Community Health/EMS Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	789.9	8,505.6	295.8	9,591.3
Community Health Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,463.2	350.0	500.0	2,313.2
Emergency Medical Svcs Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,710.1	0.0	50.0	1,760.1
State Medical Examiner	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,271.4	0.0	0.0	1,271.4
Public Health Laboratories	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,745.4	1,889.8	102.8	4,738.0
Tobacco Prevention and Control	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,120.3	3,120.3
Totals	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**20,475.2**	**30,348.0**	**14,079.9**	**64,903.1**

Public Health
Summary of RDU Budget Changes by Component
From FY2004 Authorized to FY2005 Governor

All dollars shown in thousands

	General Funds	Federal Funds	Other Funds	Total Funds
FY2004 Authorized	**0.0**	**0.0**	**0.0**	**0.0**
Adjustments which will continue current level of service:				
-Nursing	27.5	266.2	-17.3	276.4
-Public Health Admin Svcs	116.9	-337.6	9.0	-211.7
-Certification and Licensing	446.2	133.2	155.4	734.8
-Epidemiology	-191.2	312.7	-612.0	-490.5
-Bureau of Vital Statistics	-214.5	-48.9	212.2	-51.2
-Community Health/EMS Services	42.5	-1,254.4	-111.3	-1,323.2
-Community Health Grants	0.0	0.0	500.0	500.0
-State Medical Examiner	39.4	0.0	0.0	39.4
-Public Health Laboratories	64.9	-88.4	-10.8	-34.3
-Tobacco Prevention and Control	0.0	0.0	-500.0	-500.0
Proposed budget decreases:				
-Nursing	-1,368.0	-4.0	-963.6	-2,335.6
-Public Health Admin Svcs	-6.3	-26.2	-198.9	-231.4
-Certification and Licensing	-1.9	-5.8	0.0	-7.7
-Epidemiology	-203.4	-70.1	-310.1	-583.6
-Bureau of Vital Statistics	-0.6	-0.5	-120.3	-121.4
-Community Health/EMS Services	-110.1	-2,787.6	-494.0	-3,391.7
-State Medical Examiner	-13.1	0.0	0.0	-13.1
-Public Health Laboratories	-140.1	-8.2	-220.5	-368.8
-Tobacco Prevention and Control	0.0	0.0	-22.7	-22.7
FY2005 Governor	**20,475.2**	**30,348.0**	**14,079.9**	**64,903.1**